

WO 00/55337

PCT/CA00/00288

1/10
SEQUENCE LISTING

<110> Univ rsity of Victoria Innovation and Development Corporation

<120> Trangenic Plants that are Resistant to a Broad Spectrum
of Pathogens

<130> 3050-20/PAR

<140>

<141>

<150> 60/125,072

<151> 1999-03-17

<160> 41

<170> PatentIn Ver. 2.0

<210> 1

<211> 443

<212> DNA

<213> Phyllomedusa bicolor

<220>

<221> CDS

<222> (58)..(294)

<400> 1

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Met Asp Ile Leu Lys Lys Ser Leu Phe Leu Val Leu Phe Leu Gly Leu
  1             5             10             15
gtt tcc ctt tcc atc tgt gaa gaa gag aaa aga gaa aat gaa gat gag      153
Val Ser Leu Ser Ile Cys Glu Glu Glu Lys Arg Glu Asn Glu Asp Glu
          20             25             30
gag aaa caa gat gac gag caa agt gaa atg aag aga gct atg tgg aaa      201
Glu Lys Gln Asp Asp Glu Gln Ser Glu Met Lys Arg Ala Met Trp Lys
          35             40             45
gat gtg tta aaa aaa ata gga aca gtg gcc tta cat gca gga aaa gcg      249
Asp Val Leu Lys Lys Ile Gly Thr Val Ala Leu His Ala Gly Lys Ala
          50             55             60
gct tta ggt gca gtt gct gat aca ata agt caa gga gag caa taa      294
Ala Leu Gly Ala Val Ala Asp Thr Ile Ser Gln Gly Glu Gln
          65             70             75
agtgaaaaaa atttaaaatt gaattactct aaatagaaca attagcaata attgtgtcaa 354
acctacatta aagcatactg aaccaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 414
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa                                443
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<211> 78

0936885-09101

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<212> PRT

<213> Phyllomedusa bicolor

<400> 2

Met Asp Ile Leu Lys Lys Ser Leu Phe Leu Val Leu Phe Leu Gly Leu
 1 5 10 15

Val Ser Leu Ser Ile Cys Glu Glu Glu Lys Arg Glu Asn Glu Asp Glu
 20 25 30

Glu Lys Gln Asp Asp Glu Gln Ser Glu Met Lys Arg Ala Met Trp Lys
 35 40 45

Asp Val Leu Lys Lys Ile Gly Thr Val Ala Leu His Ala Gly Lys Ala
 50 55 60

Ala Leu Gly Ala Val Ala Asp Thr Ile Ser Gln Gly Glu Gln
 65 70 75

<210> 3

<211> 27

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<213> Phyllomedusa bicolor

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<211> 31

<212> PRT

<213> Phyllomedusa bicolor

<400> 4

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 20 25 30

<210> 5

<211> 36

<212> PRT

<213> Pachymedusa dactylicolor

<400> 5

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Ser Lys Lys Ala Ala Gly Lys Ala Ala Leu Gly Ala Val Ser Glu Ala
 20 25 30

Leu Gly Glu Gln
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<210> 6
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 <212> PRT
 <213> *Pachymedusa dactinolor*

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 Ala Val Leu Asn Ala Val Thr Asn Met Ala Asn Gln Asn Glu Gln
 20 25 30

<210> 7
 <211> 35
 <212> PRT
 <213> *Agalychnis annae*

<400> 7
 Gly Met Trp Ser Thr Ile Arg Asn Val Gly Lys Ser Ala Ala Lys Ala
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 Ala Asn Leu Pro Ala Lys Ala Ala Leu Gly Ala Ile Ser Glu Ala Val
 20 25 30

Gly Glu Gln
 35

<210> 8
 <211> 29
 <212> PRT
 <213> *Agalychnis annae*

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 Ala Ala Leu Gly Ala Val Lys Thr Leu Ala Gly Glu Gln
 20 25

<210> 9
 <211> 30
 <212> PRT
 <213> *Agalychnis annae*

<400> 9
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 1 5 10 15
 Ala Leu Asn Ala Val Thr Gly Met Val Asn Gln Gly Glu Gln
 20 25 30

<210> 10
 <211> 34
 <212> PRT
 <213> *Phyllomedusa sauvagei*

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<400> 10

Ala Leu Trp Lys Thr Met Leu Lys Lys Leu Gly Thr Met Ala Leu His
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Ala Gly Lys Ala Ala Leu Gly Ala Ala Ala Asp Thr Ile Ser Gln Gly
 20 25 30

Thr Gln

<210> 11

<211> 34

<212> PRT

<213> Phyllomedusa sauvagei

<400> 11

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Ala Gly Lys Ala Ala Leu Gly Ala Ala Ala Asn Thr Ile Ser Gln Gly
 20 25 30

Thr Gln

<210> 12

<211> 30

<212> PRT

<213> Phyllomedusa sauvagei

<400> 12

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Ala Ala Leu Gly Ala Val Lys Lys Leu Val Gly Ala Glu Ser
 20 25 30

<210> 13

<211> 27

<212> PRT

<213> Phyllomedusa sauvagei

<400> 13

Ala Leu Trp Met Thr Leu Leu Lys Lys Val Leu Lys Ala Ala Ala Lys
 1 5 10 15

Ala Leu Asn Ala Val Leu Val Gly Ala Asn Ala
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<210> 14

<211> 29

<212> PRT

<213> Phyllomedusa sauvagei

<400> 14

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Ala Ala Lys Ala Ala Val Lys Ala Val Thr Asn Ala Val
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5 10 15

tta tct ctc tgt gag gaa gag aga gat gcc gat gaa gaa aga aga gat 154
Leu Ser Leu Cys Glu Glu Glu Arg Asp Ala Asp Glu Glu Arg Arg Asp
20 25 30

gat ctc gaa gaa agg gat gtt gaa gtg gaa aag cga ttt ttt cca gtg 202
Asp Leu Glu Glu Arg Asp Val Glu Val Glu Lys Arg Phe Phe Pro Val
35 40 45 50

att gga agg ata ctc aat ggt att ttg gga aaa taa ccaaaaaaag 248
Ile Gly Arg Ile Leu Asn Gly Ile Leu Gly Lys
55 60

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<210> 16
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<213> Rana temporaria
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<400> 16
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  1             5             10             15
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Ile Asn Leu Ser Leu Cys Glu Glu Glu Arg Asp Ala Asp Glu Glu Arg
20 25 30

Arg Asp Asp Leu Glu Glu Arg Asp Val Glu Val Glu Lys Arg Phe Phe
35 40 45

Pro Val Ile Gly Arg Ile Leu Asn Gly Ile Leu Gly Lys
50 55 60

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<210> 17
<211> 13
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[illegible]

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<212> PRT

<213> Rana temporaria

<400> 17

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<210> 18

<211> 13

<212> PRT

<213> Rana temporaria

<400> 18

Phe Leu Pro Leu Ile Gly Arg Val Leu Ser Gly Ile Leu
1 5 10

<210> 19

<211> 13

<212> PRT

<213> Rana temporaria

<400> 19

Leu Leu Pro Ile Val Gly Asn Leu Leu Lys Ser Leu Leu
1 5 10

<210> 20

<211> 13

<212> PRT

<213> Rana temporaria

<400> 20

Leu Leu Pro Ile Leu Gly Asn Leu Leu Asn Gly Leu Leu
1 5 10

<210> 21

<211> 13

<212> PRT

<213> Rana temporaria

<400> 21

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1 5 10

<210> 22

<211> 13

<212> PRT

<213> Rana temporaria

<400> 22

Val Leu Pro Ile Ile Gly Asn Leu Leu Asn Ser Leu Leu
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<210> 23

<211> 13

<212> PRT

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<213> Rana temporaria

<400> 23

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<210> 24

<211> 12

<212> PRT

<213> Rana temporaria

<400> 24

Leu Ser Pro Asn Leu Leu Lys Ser Leu Leu Gly Lys
 1 5 10

<210> 25

<211> 10

<212> PRT

<213> Rana temporaria

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 1 5 10

<210> 26

<211> 13

<212> PRT

<213> Rana temporaria

<400> 26

Phe Val Gln Trp Phe Ser Lys Phe Leu Gly Arg Ile Leu
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<210> 27

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<212> DNA

<213> Phyllomedusa bicolor

<220>

<221> CDS

<222> (1)..(99)

<400> 27

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 1 5 10 15

cat gca ggg aag gcc gcg ctt gga gca gta gcc gac acc atc tcg cag 96
 His Ala Gly Lys Ala Ala Leu Gly Ala Val Ala Asp Thr Ile Ser Gln
 20 25 30

taa

99

<210> 28

<211> 32

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<212> PRT

<213> Phyllomedusa bicolor

<400> 28

Met Ala Met Trp Lys Asp Val Leu Lys Lys Ile Gly Thr Val Ala Leu
 1 5 10 15

His Ala Gly Lys Ala Ala Leu Gly Ala Val Ala Asp Thr Ile Ser Gln
 20 25 30

<210> 29

<211> 57

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:PCR primer

<400> 29

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<210> 30

<211> 63

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:PCR primer

<400> 30

ttactgcgag atgggtgctgg ctactgctcc aagcgcggcc ttccctgcat ggagggcgac 60
 agt 63

<210> 31

<211> 31

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:PCR primer

<400> 31

tctagaggta ccatggccat gtggaaagac g 31

<210> 32

<211> 38

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:PCR primer

<400> 32

caagcttctg cagagctctt actgagat ggtgctgg 38

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<210> 33
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 <221> CDS
 <222> (1)..(57)

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 gga atc ctg taa
 Gly Ile Leu 60

<210> 34
 <211> 19
 <212> PRT
 <213> Rana temporaria

<400> 34
 Met Ala Ser Arg His Met Phe Leu Pro Leu Ile Gly Arg Val Leu Ser
 1 5 10 15
 Gly Ile Leu

<210> 35
 <211> 45
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:PCR primer

<400> 35
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<210> 36
 <211> 45
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:PCR primer

<400> 36
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<210> 37
 <211> 30
 <212> DNA
 <213> Artificial Sequence

<220>

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<223> Description of Artificial Sequence:PCR primer

<400> 37

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30

<210> 38

<211> 29

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:PCR primer

<400> 38

ctgcagagct cttacaggat tcccagagag

29

<210> 39

<211> 4

<212> PRT

<213> Phyllomedusa bicolor

<400> 39

Ala Met Trp Lys

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<210> 40

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:spacer sequence

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Ala Ser Arg His

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<210> 41

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:spacer sequence

<400> 41

Ala Leu Trp Lys

1

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